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BOROUGH OF JARROW  
EDUCATION COMMITTEE..

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❧ *REPORT* ❧

OF THE

*School Medical Officer*

FOR THE

*Year Ended December 31st, 1920.*

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G. R. BRUCE, O.B.E., M.A., M.D., D.P.H.,  
SCHOOL MEDICAL OFFICER.



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Health Department,  
Jarrow,  
April, 1921.

TO THE MEMBERS OF THE EDUCATION COMMITTEE.

Gentlemen,

I have the honour to lay before you my report as School Medical Officer for 1920.

I recommend that the part of the Authority's draft scheme for 10 years' development relating to the School Medical Service should be carefully read in conjunction with the present report. The Authority's scheme contains a complete presentation of the present position of the School Medical Service and of its developments, both those immediately necessary and likely to be carried out in the near future, and those which owing to economic and other considerations must be spread over a series of years. In view of this I have dealt in a cursory way only with several proposed schemes which are fully gone into in the draft.

To Dr. J. Johnstone Weir, J.P., Chairman of the Children's Care Committee, and to Mr. Spencer, the Secretary to the Education Committee, I record my grateful thanks for ever helpful co-operation. I wish to emphasise the most cordial relations which exist between the School Medical Service and all teachers under this Authority.

I beg to remain,

Gentlemen,

Your obedient Servant,

G. R. BRUCE.



# SCHOOL MEDICAL REPORT.

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## 1. STAFF.

The staff of the School Medical Service consists of the following :—

- (a) One part-time School Medical Officer who is also Medical Officer of Health, etc., and devotes approximately 60% of his time to school medical work.
- (b) One whole time School Nurse.
- (c) One clerk approximately 80% of her time.

## 2. CO-ORDINATION WITH OTHER HEALTH SERVICES.

### (a) Infant and Child Welfare.

### (b) Nursery Schools.

### (c) Debilitated Children under school age.

(a) The School Medical Officer is responsible both for the administrative and the clinical work of two flourishing Infant Welfare Centres. Complete co-ordination is therefore assured in many ways. For example clerical and clinical methods are similar. Records can be transferred easily from the Child Welfare Centres to the School Clinic, and children attending the centres on reaching school age are advised to attend the school clinic. Unfortunately the Child Welfare Clinics are situated apart from the School Clinic but eventually all may be housed under one roof.

(b) So far no Nursery Schools have been established by this Authority.

(c) Debilitated children under school age attending the Child Welfare Centres automatically come under the care of the School Medical Officer and their records are available if necessary on their attaining school age. Such children may also be provided with dried milk or Virol at cost price, reduced or free.

## 3. SCHOOL HYGIENE.

The hygienic condition of the various schools has engaged the earnest attention of the Authority during the past year. An important programme of re-decoration, repairs and hygienic improvements postponed since the onset of the war has been undertaken and a start made.

Of the schools in the district two are modern and comparatively up-to-date, Croft Terrace and the St. Bede's Junior. The remainder date back some 30 or 40 years and in addition to exhibiting recognised deficiencies in school architecture and hygiene of a bygone decade show unmistakeable signs of the devastating effects of time. Three of them, the St. Peter's, the St. Bede's Senior Boys, and the St. Bede's Infants are undoubtedly ripe for closure as soon as economic considerations permit.

An interesting experiment is in process of being made, namely, turning a large villa at the western extremity of the Borough into a Central School for Catholic girls. The site near the new housing scheme is excellent, the rooms are large and airy, while there are extensive grounds attached.

(a) **Overcrowding.**—The following table shows the number of schools, the places available, the number of children on the roll and the average attendance for the month of December, 1920. It is obvious that the danger line has been reached with regard to school places. The birth-rate of Jarrow, though always higher than that of the country generally, showed the universal tendency to fall during the past two decades, but in 1920 rose rapidly from 27 per 1000 to 34.8 per 1000, this representing an increase of some 300 births. As this was coupled with a great fall in infantile mortality it will entail, especially if continuous, a considerable increase in school places in a few years time.

**Table showing Schools, Accommodation, etc.**

	Depart- ment.	Accommo- dation.	No. on Register.	Average Attendance.
SENIOR DEPTS.				
Central .....	M. ...	360 ...	316 ...	300
Higher Grade Council .....	M. ...	108 ...	96 ...	80
Grange Council .....	B. ...	400 ...	362 ...	336
Grange Council .....	G. ...	350 ...	359 ...	332
Dunn Street Council .....	B. ...	422 ...	448 ...	428
Dunn Street Council .....	G. ...	422 ...	437 ...	398
Croft Terrace Council .....	M. ...	720 ...	671 ...	613
Bede Burn Council .....	M. & I. ...	342 ...	295 ...	269
Ellison C.E. ....	B. ...	240 ...	240 ...	227
Ellison C.E. ....	G. ...	230 ...	231 ...	211
St. Peter's C.E. ....	M. ...	412 ...	481 ...	437
St. Bede's R.C. ....	C.G. ...	150 ...	64 ...	60
St. Bede's R.C. ....	S.B. ...	379 ...	451 ...	386
St. Bede's R.C. ....	S.G. ...	320 ...	382 ...	315
St. Bede's R.C. ....	J.B. ...	438 ...	417 ...	362
St. Bede's R.C. ....	J.G. ...	435 ...	392 ...	348



## INFANTS' DEPTS.

	Depart- ment.		Accommo- dation.		No. on Register.		Average Attendance.
Grange Council .....	I.	...	400	...	379	...	336
Dunn Stret Council .....	I.	...	444	...	368	...	325
Croft Terrace Council .....	I.	...	432	...	308	...	269
Ellison C.E. ....	I.	...	242	...	218	...	192
St. Peter's C.E. ....	I.	...	210	...	124	...	111
St. Bede's R.C. ....	I.	...	369	...	417	...	334
Totals .....	—		7825		7456		6669
Corresponding period of 1919 ...	—		7795		7423		6149

In 12 class rooms two classes were observed being conducted in the one room at the same time to the detriment of the teacher's nerves and the children's attention.

(b) **Ventilation.**—This is by windows throughout with roof ventilators in certain cases. On the whole the class rooms are efficiently ventilated; generally when stuffiness is complained of the available means of ventilation have not been properly used. In certain instances owing to the construction of the school through ventilation is absent or deficient.

(c) **Lighting.**—Natural lighting in the more recent schools is admirable, in the older schools generally moderate or in parts of class rooms inferior. The artificial lighting in winter is generally by gas and last year (1920) complaints as to the inefficiency of this were fairly general.

(d) **Warming.**—The hot water system throughout appeared to be most satisfactory.

(e) **Equipment, Desks, Blackboards.**—These are generally satisfactory and up-to-date. The dual desk has almost replaced the older continuous form. An increase in the number of little tables and chairs available for the smallest infants is desirable in the future.

(f) **Sanitary Conveniences.**—These are generally of the trough pattern, adequate in numbers, but antiquated in design and difficult to keep in a thoroughly satisfactory condition. In two schools at least, the Higher Grade and Ellison, these are marked down for improval.

(g). **Water for drinking purposes.**—This is adequate. An experiment has been made with an automatic drinking tap where on pressure the water springs into the mouth of the child thereby obviating the drinking vessel shared by all and sundry. On medical grounds this innovation is cordially to be recommended as likely to diminish one source of infection; but I understand that owing to the present high prices it is impossible to proceed further with its installation in the meantime.

(h) **Lavatories.**—Wash basins with cold water, soap and towels are available at all schools and looked after in a satisfactory manner. Attention has been paid during the year to the possibility of Ringworm and other infectious skin diseases being spread by indiscriminate use of school towels.

(i) **Cloakrooms.**—In certain cases cloakroom accommodation is restricted or unsatisfactory, *e.g.*, Dunn St. Boys' School, Grange Girls, Ellison Boys and Girls; in other schools, *e.g.*, St. Bede's Sen. Boys and Girls and St. Peter's School, some class rooms have to serve as cloakrooms as well, a very objectionable feature.

(j) **General Cleanliness.**—Apart from the condition of the walls and paintwork of these schools which have not been redecorated since the war began the general cleanliness of the schools is well attended to.

(k) **Arrangements for drying clothes and boots.**—Apart from open fires in teachers' rooms or in a very few class rooms, obviously means of very restricted use, no arrangements exist.

#### 4. MEDICAL INSPECTION.

(a) **Age Groups of Children inspected.**—At the routine school medical inspection 1,692 children were examined of whom 499 were entrants, 604 belonged to the intermediate group of 8 year old, and 589 were leavers aged 12 or 13. Table 1 of the appendix gives further details. In addition 280 children were inspected as special cases at the schools.

(b) **Schedule of Medical Inspection.**—The schedule of medical inspection followed has been that previously in use by the Authority and is on the lines recommended by the Board of Education.

(c) **Early Ascertainment of Crippling Defects.**—A certain number of children suffering from crippling defects such as old infantile paralysis, tuberculosis of bones and joints and advanced rickets are discovered at routine medical inspection and at the inspection clinic. In addition each head teacher has furnished a list of all children believed to be suffering from crippling defects but able to attend school. These children were seen as special cases at the school and put in their proper category. The School Attendance Officers also have reported all cases of crippling where the children are permanently prevented from attending school. These children have where possible been medically examined at the school clinic and in cases where they have been unable to attend the school nurse has visited them at the homes. From the various sources a register of cripples has been compiled which is kept up-to-date.

(d) **Disturbance of School Arrangements.**—The children are examined either in the head teacher's room or where that is not suitable



in a class room which can be conveniently given up. At St. Peter's School the Parish Hall is used. The children leave the class room two or three at a time returning as soon as they are examined. School arrangements are therefore not disturbed to any appreciable extent. As the School Nurse is in attendance it is not necessary to take away a teacher for the purpose. The presence of parents and the traffic of so many children in and out of the class rooms into the examination room must however disturb the usual routine to some extent.

(e) **Inspection Clinic.**—The head teachers, school attendance officers and parents have availed themselves fully of the Inspection Clinic which is open on three mornings a week. 2,176 children were specially referred in this way the great majority of whom were suffering from minor ailments and the total attendances for all purposes were 6,094.

## 5. FINDINGS OF MEDICAL INSPECTION.

### MEDICAL TREATMENT.

As a matter of convenience it is proposed to consider under these headings all defects whether found at routine examination or by special inspection. It is also proposed to make any notes required as to treatment under the same heading.

#### (a) UNCLEANLINESS.

(1) **HEAD.**—At the routine inspection 123 children were found with unclean heads. Only a few of these children suffered from verminous heads of the grosser type with lice, sores and impetigo. The majority were girls with nitty heads which by the spasmodic efforts of the parents were not allowed to develop into an actively verminous condition.

During the school year the school nurse has been able as a rule to devote two sessions a week to the examination of heads in the school. As we find the boys' heads nearly always nit and vermin free the nurse's attention has been restricted to the girls' heads. The result of her work is as follows :—

(a)	Average number of visits made to each school .....	7
(b)	Total number of examinations .....	4684
(c)	Number of individual children found unclean .....	558
	Nitty.....	536
	Verminous ...	22
(d)	Number of individual children remedied at Nurse's visit of re-inspection .....	443

In addition 36 children were seen at the school clinic with unclean heads. These were the worst cases and were referred for supervision and

advice until they were cleansed. This inspection of heads, etc., by the nurse at the schools is work of great importance. At routine school inspection by the S.M.O. the parents often clean up the children for the occasion, sending them in their ' Sunday ' boots and clothes. The nurse's visits are without warning and she sees the children as they really are. Insufficient time at present is being devoted to this but the appointment of an additional nurse, part time for dental work, will remedy this.

(2) BODY.—36 children at the routine inspection and 21 children at the clinic were found suffering from an obviously unclean condition of the body, a few with body lice, the majority very badly flea bitten.

(3) ARRANGEMENTS FOR TREATMENT OF UNCLEANLI-NESS.—The view is strongly held that it is the duty and privilege of the parents to keep their children vermin free. So far no cleansing station has been established, nor, indeed, with few exceptions is such an arrangement immediately necessary. As a result of the notices which give a full and simple explanation of the necessary treatment, visits to the homes by the Sanitary Inspector and the School Nurse and the offer where necessary of soap and disinfectants many cases are completely cleansed and a certain number are treated up to a point. This point unfortunately leaves the child with a few nits firmly cemented on to the hair, a sure legacy of future mischief. Warmed vinegar and a fine toothed comb appear to give the best results, but without perseverance and infinite patience final cure is hard to obtain.

The impression obtained from recent routine inspection is that the general cleanliness of the heads is improving, an opinion which is confirmed by the teachers.

(4) LEGAL PROCEEDINGS.—During the year no cases were taken into court either under the Children's Act of 1908 or the School Attendance Bye-Laws.

(5) DEFECTIVE FOOT GEAR AND CLOTHING.—At the routine school inspection 188 children were discovered with defective or no boots and 73 children with defective or dirty clothing. These numbers refer to the worst cases only. As the year progressed the condition of unemployment grew worse and as a very large proportion of our school children belong to large families, the father being a labourer, it was inevitable that the major part of the family income had to go for food to the detriment of the children's boots and clothes. A fair proportion of the poorer boys go barefoot in the summer time—a fact which helps to explain the large number of septic sores of the feet treated at the clinic. I believe on the whole that such children take less harm from being barefooted than if they sat in class rooms with bad boots soaking through. Attention must be drawn to the poor quality and defective quantity of the



clothing in many instances. It is rare to find a girl with proper woollen combinations—generally some sort of cotton or flannellette garment is worn, of little value for giving warmth. Boys are often found in the coldest weather wearing trousers, unlined with no drawers, a thin cotton shirt and a blue knitted jersey—most inadequate protection for this inclement climate. Clothing of this type must predispose children to respiratory and rheumatic troubles. At present there is no general boot and clothing fund whereby the most deserving cases can be helped. In some instances the parents have not given the matter proper consideration and are able to remedy the condition, but in many cases the economic circumstances are such that they can do little.

### **(b) MINOR AILMENTS. (Including Skin Disease.)**

The group of diseases comprised under the title of Minor Ailments includes ringworm, scabies, impetigo, minor skin troubles such as septic sores and cuts, various eye troubles, deafness and ear discharge. Prior to the institution of the School Medical Service they received but little attention and in the aggregate must have been a source of much misery and suffering to the children. Now they constitute a large portion of the work, the majority being seen as special cases and referred to the clinic for treatment.

#### **Group of Skin Diseases.**

(1) RINGWORM OF THE HEAD.—4 cases were detected at routine inspection and 63 were sent to the clinic for inspection and treatment. All these cases were treated at the clinic by means of an initial application of a mixture containing equal parts of the liniment of iodine and pure carbolic acid repeated at intervals as necessary. The cure of Ringworm of the head by chemical means is a long and tedious business, the majority of the cases taking 2 to 3 months before the hair grows over again while in some cases the treatment may last as long as 6 months. Children with Ringworm of the head have until lately been allowed to attend school provided they wear a white linen cap changed daily. Experience has shown that infection is liable to be spread in the school during the early weeks of treatment and accordingly cases of Ringworm of the head are being excluded as a rule for 4 weeks, after which they are allowed to re-attend with linen caps.

During the year overtures were made to the South Shields Educational Authority and to the Newcastle Royal Infirmary to have our cases of Ringworm treated by X-Rays. In neither case was it found practicable to accede to our request. It is hoped that a way out of the difficulty may be found, as experience elsewhere teaches that X-Ray treatment provides a much speedier and more certain cure than any method of chemical treatment however faithfully carried out.



(2) RINGWORM OF THE BODY.—56 cases were referred for treatment from the inspection clinic. Of these 49 received treatment at the clinic and the remainder were treated by their private doctor. These cases were excluded until considered free from infection, a period generally ranging from 3 to 6 weeks.

(3) SCABIES.—7 cases were discovered at routine medical inspection and 81 cases were referred for treatment after examination at the clinic. As we have no cleansing station full instructions as to ordinary treatment by baths and sulphur ointment are given to the parents, children being excluded until considered free from infection. Treatment by parents is slow, but generally after admonition, when the children are found not to be progressing, sure. The period of exclusion runs as a rule from 2 to 6 weeks and is often lengthened by the persistence of septic sores after all evidence of fresh parasitic burrows has disappeared. The infection of scabies is apt to be familial, often running through an entire family of 3 or 4 children and the parents as well. The provision of a cleansing station would help to prevent spread as two or three treatments with proper disinfection of the clothing would eliminate the source of infection in the home as compared to the much slower method of home treatment. Valuable school attendances would also be saved.

(4) IMPETIGO CONTAGIOSA.—24 cases were discovered at the routine medical inspection and 391 cases were dealt with as specials at the clinic. This defect—a scabby condition of the face and head, often in girls associated with nits and vermin, and always highly contagious, was extremely common in Jarrow schools last year. On account of its infectivity steps were taken to have all cases from the mildest to the most severe sent to the clinic for inspection. All cases definitely suffering from impetigo are excluded until quite cured.

In as much as the disease is largely due to conditions of uncleanness and often parental carelessness and also as its cure is easily within the powers of any average intelligence, parents have been directed to treat cases at home under supervision of the clinic. Full printed instructions are given drawing attention to the infectious nature of the complaint, its mode of spread by personal contact, towels, clothing, etc., and the simple cure by starch poultices and ammoniated mercury ointment. A few intractable cases, 19, were treated at the school clinic. Altogether 387 cases are reported as having received treatment during the year.

I am convinced that the prevalence of this complaint is associated with the low standard of housing conditions and the overcrowding which now obtain in this town, together with the lack of knowledge of hygiene and of the virtues of cleanliness on the part of parents. Any improvements in this direction will be slow, but with the development of the housing scheme, also sure, for as the people are better housed so also

will they be better able to practice the general laws of hygiene. Meanwhile the provision of school baths in some of the older schools and in any new schools that are projected, also of a cleansing centre, would undoubtedly help—but all these are dependent on present economic considerations.

(5) OTHER SKIN DEFECTS.—With the exception of a few cases of skin diseases rarely seen among school children such as psoriasis or erythema nodosum, the term “ other skin diseases ” is confined to septic skin conditions and injuries, 22 being discovered at routine inspection and 391 referred to the clinic. Of this group the majority, 310, were treated at the treatment centre to the great advantage of the children, as a certain number of these minor septic troubles of the skin would undoubtedly, unless properly treated, develop into more serious conditions.

### (c) TONSILS AND ADENOIDS.

During the year the following numbers of cases were detected :—

	ROUTINE INSPECTION.		SPECIAL CASES.	
	No. for Treatment.	No. for Observation.	No. for Treatment.	No. for Observation.
Enlarged Tonsils ...	52	55	15	1
Adenoids ... ..	6	10	7	1
Enlarged Tonsils and Adenoids ... ..	26	26	38	2

The assessing of the necessity for treatment in cases of enlarged tonsils or adenoids or both requires considerable care. In every case, before finally giving the recommendation for operative treatment, in addition to the presence of enlarged tonsils or adenoids the question of enlarged glands of the neck, of recurrent attacks of sore throat and colds, of deafness and general intelligence is thoroughly considered. Where the operation is not urgent the cases should be kept under observation, the effect of breathing exercises and general hygiene being given a thorough trial.

Where operation was definitely indicated it was found that 29 cases had received treatment, mostly at the Newcastle Royal Infirmary or at the Ryehill Ear, Nose and Throat Hospital. This number may seem disappointing, but the explanation is the difficulty in securing treatment at these hospitals. A long wait—several months—is usually necessary ; several railway journeys are entailed which many parents owing to the increased fares do not care to undertake. In addition many parents



(and they have much reason on their side) do not like the long journey home by tram and train on the day of operation.

Consequently the Authority submitted a scheme for the operative treatment of Tonsils and Adenoids at the local Palmer's Hospital in November, 1920, which is now under consideration by the Board of Education. As soon as sanction for this scheme is obtained many of the cases left over from 1920 can be dealt with as also any cases already seen in 1921. Apart from this it is unlikely that the proportion of cases for reasons stated above receiving operative treatment is likely to increase.

Should a local operative scheme be installed it is proposed to start post-operative treatment in the form of classes for breathing exercises.

#### (d) TUBERCULOSIS.

Tuberculosis in all its forms is extremely prevalent in this town the notification rate being 3.8 per 1,000 and the death rate for all kinds of Tuberculosis 2.3 per 1,000 during 1920, practically double the rate for the country generally. In this increased prevalence school children take their full share. As proof of this statement it is proposed to detail all information at our disposal as regards this disease amongst school children.

#### 1. CASES SEEN AT ROUTINE SCHOOL INSPECTION AND AS SPECIALS.

TUBERCULOSIS.	ROUTINE INSPECTION.		SPECIAL CASES.	
	No. for Treatment.	No. for Observation.	No. for Treatment.	No. for Observation.
Pulmonary.				
Definite     ...     ...	4	0	2	0
Suspected   ...     ...	3	11	3	20
Non-Pulmonary.				
Glands     ...     ...	7	12	9	10
Spine      ...     ...	0	0	1	0
Hip        ...     ...	0	3	0	0
Other Bones & Joints	0	1	2	3
Skin ...     ...     ...	1	3	2	1
Other Forms     ...	0	0	0	0

2. TUBERCULOSIS.—Cases reported on Form B. by School Medical Officer during 1920 :—

Pulmonary .....	13
Other Forms .....	25

### 3. CASES OF TUBERCULOSIS REPORTED UNDER TABLE III. (EXCEPTIONAL CHILDREN) FOR 1920.

			Boys	Girls	Total
Physically Defective.	Pulmonary Tuberculosis.	Attending Public Elementary Schools...	5	10	15
		Attending Certified Schools for Physically Defective Children ...	0	0	0
		In Institutions other than Certified Schools ...	3	5	8
		Not at School ...	20	11	31
	Crippling due to Tuberculosis.	Attending Public Elementary Schools...	5	4	9
		Attending Certified Schools for Physically Defective Children ...	0	0	0
		In Institutions other than Certified Schools ...	0	1	1
		Not at School ...	6	6	12

This does not however include cases of tuberculosis glands of which a special register compiled in 1920 contained the names of 41 children.

### 4. TUBERCULOSIS DISPENSARY.

No. of school children on books during 1920..... 162  
 No. of school children receiving Sanatorium treatment during 1920 9

### 5.

	Pulmonary.	Other forms
Notifications, Primary received by Health Department, during 1920, ages 5-15 ...	23	33
Deaths, ages 5-15, notified to Health Department during 1920 ...	7	3

The above statistics prove that Tuberculosis in all its forms is a very important disease amongst school children in this district.

Pulmonary Tuberculosis among school children is or should be a comparatively rare disease, not to be lightly diagnosed. In this district the diagnosis can as seen by these tables be made with comparative frequency and by several independent observers.

The causes underlying the prevalence of Tuberculosis are largely social and environmental. A large proportion of our school children are



being brought up in one, two or three roomed houses of a poor description, often overcrowded, without any of the amenities of the modern house and often containing an actively infectious case of Tuberculosis probably pulmonary. Many of the children come from large families where the father is an unskilled labourer who at the best of times just reaches an economic scale of living, but being unable to save anything, immediately falls below that standard as soon as employment is scarce or unobtainable—the present position. Furthermore looking at the other important environment to which the child is subject—namely, the school—we find that several of our schools are somewhat old and much below the standard of general hygiene attained in the newer schools. Consequently the school child in an infected household is exposed to massive doses of infection under the worst possible environmental conditions in a dusty atmosphere, while in many the condition of his elementary school is not such as to help to raise his resistance.

The outlook though somewhat gloomy at the present is by no means hopeless. The community is committed to a most important and far reaching housing scheme including the demolition and reconstruction of several slum areas. New and more hygienic schools will undoubtedly arise. Open-air schools for the actively tuberculous and the pre-tuberculous child are proposed and will be established when the economic situation is stabilised. The three measures, better housing for all, more hygienic schools for all children and special open-air schools for the tuberculous, indicate the broad lines of social and municipal reform which should be traversed.

At present every case of tuberculosis coming within the purview of the S.M.O. is at once transferred to the County of Durham Tuberculosis Dispensary at Jarrow under Dr. Boleyn with whom the most constant and cordial co-operation obtains. At the Dispensary the child receives appropriate treatment although owing to the restriction of available beds and the large number of cases but few children can be sent away to a sanatorium. This is regrettable as active Tuberculosis in childhood, especially surgical, yields readily to sanatorium methods. Cases of active disease are excluded from school, also surgical cases with running sores. The loss of school attendance owing to Tuberculosis must therefore in the aggregate be serious. The provision of open-air schools will ensure that several children now excluded will enjoy proper educational privileges, as also other children suffering from Tuberculosis and attending school under poor hygienic conditions to the prejudice of their disability.

#### **(e) EXTERNAL EYE DISEASES.**

These conditions include mainly Blepharitis, Conjunctivitis, Keratitis, and Corneal Ulcers. At routine inspection 38 cases were noted for treat-



ment, while 141 were sent to the clinic for special inspection. In this class of case the skilled treatment of the school nurse affords much relief to the children and must at times avert disaster.

.134 cases were treated at the clinic and 18 cases were noted as being treated elsewhere, generally at home under their own doctor or at Sunderland Eye Infirmary.

The results of treatment especially in corneal ulcers and conjunctivitis were gratifying. A few cases causing anxiety were transferred for consultation to the Sunderland Eye Infirmary, the Authority where necessary paying the fares of the mother and child. Blepharitis cases are often very resistant to treatment especially where the cases have been long standing before being taken on by the School Nurse.

### (I) DEFECTIVE VISION.

The following table shows the number of cases of Defective Vision and Squint discovered at routine and special examinations during 1920 :

	ROUTINE.		SPECIALS.	
	Treatment.	Observation.	Treatment.	Observation.
Defective Vision ...	239	22	29	2
Squint ...	29	10	26	1

As a rule glasses were not recommended where the vision was better than 6-12ths both eyes, unless in cases of eyestrain, headache or mental fatigue. It was discovered also that a proportion of the 8-year-old group could not at first examination read the smaller letters but when they came up for refraction a few months later were quite well able to read them. Cases of squint in infants were invariably recommended for refraction and suitable glasses but among older children glasses were only recommended when the sight of the non-squinting eye was less than 6-6ths. Generally in these cases the squinting eye is of little value for purposes of useful vision, but the operative treatment by advancement was discussed with the parent.

It will be noted that the number of children requiring treatment for defective vision is high, but that I believe is due to the fact that routine medical inspection had been practically suspended for the past three years owing to the absence of the regular S.M.O. Defective vision in school children unless obviously bad is not as a rule detected except by the exact tests of the Snellen Types. Consequently routine inspection last year picked up a considerable number of eye defects which would have been treated under normal conditions.

In previous years most cases of defective vision had refraction performed at Sunderland Eye Infirmary but the various Eye Hospitals of the district now refer all treatment of vision defects to the S.M.O. This necessitated practically one session per week being devoted to refraction work, prescribing of glasses and the periodical re-examination of cases provided with glasses. During the year 232 children were submitted for refraction at the school clinic or elsewhere.

Of 220 children who had glasses prescribed 132 were provided with glasses—the Authority supplying the glasses free in 72 necessitous cases. A register is kept of all cases of defective vision and squint so that after refraction every case is followed up to ensure glasses being provided eventually. At the present time owing to the large number of cases on the books refraction cannot be undertaken for some months after discovery of defective vision while the eye clinic is continually becoming more congested owing to the sound policy being adopted of having all glasses cases up for re-inspection once a year. Another eye session weekly is imperative.

#### (g) EAR DISEASE AND HEARING.

The majority of defects of the ear in school children are either otitis media or wax in the ear, with a few cases of boils and eczema. Defective Hearing is generally associated with one or other of these conditions or with enlarged tonsils or adenoids or both.

The following table shows the number of cases detected in each group :—

	ROUTINE.		SPECIAL.	
	Treatment.	Observation.	Treatment.	Observation
Defective Hearing ...	42	11	29	7
Otitis Media ...	25	2	71	0
Other Ear Diseases ...	1	0	33	2

115 of these cases received treatment at the clinic, 24 at home under their own doctor. Cases of otitis media are sometimes exceedingly resistant to the treatment available at the clinic and in such cases the parents were recommended to take the children to Ryehill Ear, Nose and Throat Hospital with a view to receiving operative treatment if necessary, namely the radical mastoid operation. Without this treatment such cases may go on indefinitely with the risk always of a serious intracranial complication such as an acute mastoid, brain abscess or



meningitis. Where deafness is definitely due to enlarged tonsils or adenoids removal is urgently called for. In this respect we will be able to offer prompt treatment, not now generally available, as soon as the Board sanctions the proposed local scheme for operative treatment.

### (h) DENTAL DEFECTS.

As little or no dental treatment is obtained without a dental clinic and the facts relating to carious teeth are the same from year to year it is unnecessary to go into the question of dental defects at any length.

At the routine examination of 1,692 children 615 were found with under 4 teeth carious and 294 with 4 or more carious teeth. In all cases a circular was given to the parents stating the evils to health from carious teeth, the advantages of sound teeth and the necessity for dental treatment. The average parent of the working class will not pay for the services of a dentist for conservative dental work though children will be taken for extraction on account of severe tooth-ache.

The Education Authority is quite prepared to establish a dental clinic and has submitted a scheme to the Board in December, 1920, for the setting up of a clinic with a part-time dentist and part-time dental nurse, the remainder of whose services (the nurse's) would be absorbed in the general school medical service. The establishment of this clinic as soon as sanction is obtained and its future development will prove one of the landmarks of the school medical service locally.

### (i) CRIPPLING DEFECTS AND ORTHOPÆDICS.

At routine and special inspection the following deformities were noted :—

	ROUTINE INSPECTION.		SPECIAL CASES.	
	Treatment.	Observation.	Treatment.	Observation.
Rickets ... ..	0	3	1	2
Spinal Curvature ...	1	0	1	3
Other Forms ...	1	19	0	0

In addition ten cases of tuberculosis of the bone and joints were noted, as causing or likely to cause crippling defects.

A better idea of the problem is however to be obtained from the census of physically defective children which was taken for the purpose

of Table 3 during 1920, as follows :—

		Boys	Girls	Total
Crippling due to Tuberculosis.	Attending Public Elementary Schools	5	4	9
	Attending Certified Schools for Physically Defective Children ...	0	0	0
	In Institutions other than Certified Schools ... ..	0	1	1
	Not at School ... ..	6	6	12
Crippling due to other causes than Tuberculosis, Paralysis, Rickets, Traumatism.	Attending Public Elementary Schools	19	19	38
	Attending Certified Schools for Physically Defective Children ...	0	0	0
	In Institutions other than Certified Schools ... ..	0	0	0
	Not at School ... ..	3	5	8

All tubercular cripples with active disease have the opportunity of treatment under the Tuberculosis Dispensary but sanatorium and hospital treatment are difficult to obtain owing to the lack of accommodation. A large hospital for surgical tuberculosis, especially in children, is urgently required to serve the whole district of Durham and Northumberland, and when this is an accomplished fact (I understand that it is definitely proposed) surgical tuberculosis in children, really the most curable of diseases, will no longer be responsible for so many ankylosed joints and permanent deformities. It is to be noted also that a considerable number of these tubercular cripples, 12 out of 32, are not attending school. The majority of these children could attend an open-air school.

Of cases of crippling due to causes other than tuberculosis there were found 46, 9 being due to exceptionally severe types of rickets and the remainder to various forms of infantile paralysis. In the majority of the infantile paralysis group the crippling is confined to one leg which is generally shorter, under-developed, and colder than the other. In 3 cases one arm is affected as well as one leg and in one case the right leg and arm, the face and speech are all affected. One case of Erb's paralysis is reported. In several cases the paralysis seems to have been present at birth, but in the majority the onset appears to have dated between the first and third years of life, in many cases the disease appearing to commence quite insidiously without any dramatic symptoms. One case of well marked talipes equino varus was noted.

As regards treatment the usual story is that the child is taken to Newcastle Royal Infirmary as soon as the paralysis is noted in infancy. Advice and treatment are obtained; the child returns a few times for electric treatment and massage, after which for reasons of expense or



time or carelessness the mother gradually drops attending. When the case is seen by the S.M.O. the paralytic effects are generally permanent and therapeutic measures can do nothing more than palliate. A few of the better class type of children do however attend the Newcastle Royal Infirmary for regular treatment and in two cases go as far as the Orthopædic Clinic of Liverpool for treatment.

What can be done for these children? (1) In the first place the paralysed child is now being caught as early as possible by the Health Visitor in the District and kept under supervision of the Maternity Centre to see that the all essential treatment of the first few months at Newcastle Royal Infirmary should be carried out systematically and conscientiously. (2) It should be possible in the future to put a child in the early and curative stage of paralysis in a special hospital or institution serving a large district for a considerable time. (3) Each smaller district such as this should have its own orthopædic out-patient clinic where the paralysed child could get electrical treatment and massage and be under the supervision of an expert from time to time. Such an arrangement might be possible in this town as the Palmer Memorial Hospital has only recently fitted up an orthopædic department for the treatment of war cripples. In any case it is a matter for future investigation. (4) The majority of these children would be better in an open-air school under special arrangements for their comfort and disabilities.

#### (j) OTHER DEFECTS AND THEIR TREATMENT.

	ROUTINE.		SPECIAL.	
	For Treat- ment.	For Obser- vation.	For Treat- ment.	For Obser- vation.
Enlarged Cervical Glands, Non-Tuberculous ...	0	9	16	3
Organic Heart Disease ...	2	16	4	4
Functional Heart Disease...	1	14	0	2
Anaemia ...	10	13	9	5
Bronchitis ...	3	24	10	9
Nervous Complaints, Epilepsy Chorea, etc. ...	1	8	7	8

As regards enlarged cervical glands and chronic bronchitis in children the important point is to make quite certain that there is no tuberculous element in the trouble. For that reason such children were brought before the S.M.O. at regular intervals until a final diagnosis could be made. 10 cases of enlarged glands and 9 cases of chronic bronchitis received satisfactory treatment the remainder of the cases only requiring observation. In the non-tuberculous type of enlarged glands the underlying cause had to be searched for and remedied, generally



carious teeth, impetigo, nitty heads or septic sores.

**Heart Disease.**—The majority of cases in children where some abnormal heart sound or murmur is heard are purely functional in type and indeed the diagnosis of organic heart disease should only be definitely made in presence of a damaged heart or with strong evidence of chorea, rheumatism or recurrent tonsillitis accompanying murmurs.

In the few cases of organic heart disease with evidence of heart failure the child is at once excluded and placed under its own doctor at home. Where the mischief is not marked, but definite, the child may be allowed to attend school under precautions, *e.g.*, no games or physical drill, supervision from its own doctor and from the S.M.O. Where the signs are believed to be merely functional no special precautions are taken.

**Anæmia.**—Degrees of anæmia more or less severe are common among children from the poorest homes, the cause being largely environmental, but probably also dietetic or symptomatic of another disease, *e.g.*, tuberculosis. Of cases recommended for treatment 12 out of 21 were noted as having been satisfactorily treated during the year.

**Nervous Complaints.**—5 out of 8 referred for treatment were satisfactorily treated.

### (k) MALNUTRITION.

The following table shows the comparative weights and heights of the age groups examined at different schools.

	Croft Ter.		St. Bede		Bede Burn Council		Ellison.		Central		Grange		Mr. Arthur Greenwood's Table (based on 500,000 observations).	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Infants, age 5														
Weights, lbs. ...	39 $\frac{1}{2}$	41	43	37	42 $\frac{3}{5}$	40 $\frac{4}{5}$	38	35	...	...	38	38	38·68	37·74
Heights, ins. ...	41 $\frac{1}{2}$	42	40	39	42	42	41	39	...	...	39	41	40·68	40·74
Intermediates, age 8														
Weights, lbs. ...	52	46	47	47	54	54	49	51	...	...	52	51	52	49·55
Heights, ins. ...	46	47	45	46	48	49	46	47	...	...	46	47	47·39	46·94
Leavers, age 12														
Weights, lbs. ...	68	67	68	67	74	75	65	70	73	74	73	71	72·66	73·86
Heights, ins. ...	54	54	53	54	55	55	53	53	55	55	55	54	54·88	55·48

It will be observed that the weights and heights of the Jarrow school children compare very favourably with Mr. Arthur Greenwood's national table, in some cases being above his scale and in a few cases slightly below.

As regards actual cases of malnutrition, a diagnosis not to be made lightly, 44 cases were noted at routine inspection as requiring treatment and 33 cases referred for observation. In every case the child looked ill or pinched, with actual signs of deficient nutrition, before the diagnosis was made, while search was made for some underlying pathological factor such as latent tuberculosis, rickets or syphilis. The question of suitable dietary was discussed, prominence being given to adequate milk, porridge, puddings, potatoes and soups rich in stock.

On re-examination it was found that in nearly all cases the parents had made some effort to carry out the recommendations, improvement in the weight and general symptoms being obtained in 40 cases.

## 6. INFECTIOUS DISEASES.

### NOTIFICATIONS OF INFECTIOUS DISEASES BY HEAD TEACHERS AND SCHOOL ATTENDANCE OFFICERS DURING 1920.

School.	Measles.	Mumps.	W. Cough.	G. Measles	C. Pox.	S. Fever.	Dip.	Infectious Skin Disease.
Bede Burn Co. ....	5	6	10	1	5	0	0	2
Croft Terrace M. ....	5	3	8	2	13	0	0	0
Croft Terrace Infs. ...	14	14	22	3	38	0	0	0
St. Bede's Infs. ....	27	2	56	2	11	0	0	0
St. Bede's J.B. ....	1	1	6	0	1	0	0	0
St. Bede's J.G. ....	9	1	4	0	2	0	0	0
St. Bede's S.B. ....	1	0	1	0	0	0	0	1
St. Bede's S.G. ....	1	5	1	0	0	0	0	0
Ellison Infs. ....	19	0	6	0	3	0	0	0
Ellison B. ....	7	3	0	0	0	1	0	1
Ellison G. ....	2	1	2	0	2	1	0	0
St. Peter's M. ....	1	0	0	0	0	0	0	0
St. Peter's Infs. ....	13	0	1	0	11	0	0	0
Dunn Street Infs. ....	22	4	30	2	16	0	0	0
Dunn Street G. ....	1	1	5	1	0	0	0	0
Dunn Street B. ....	1	2	2	0	0	1	0	0
Grange Infs. ....	23	7	19	4	25	1	0	0
Grange G. ....	2	1	0	0	1	0	0	0
Grange B. ....	1	1	0	0	1	1	0	0
Total ...	155	52	173	15	129	5	0	4



In February, 1920, an arrangement was commenced whereby immediate notification of the non-notifiable group of diseases was given by the head teachers or the school attendance officers on a special form. The school nurse immediately visited the homes, saw that proper precautions were being observed and made a report to the S.M.O. for the purpose of excluding the case and contacts where necessary and taking proper steps in the schools to prevent spread.

The information so given together with a weekly report from each school, showing the numbers absent from each infectious disease during the week, gives immediate and most valuable information to the S.M.O.

As regards notifiable infectious diseases such as scarlet fever or diphtheria the medical practitioner is usually called in early and gives the necessary notification to the Health Department.

The table shows that while there was some slight prevalence of measles, whooping cough, chicken pox and mumps in the infant schools especially, there was no epidemic. As a matter of fact a big measles epidemic—with over 800 cases—had burnt itself out in December, 1919.

Of diphtheria there is little to report as the incidence is small. Scarlet fever was prevalent until the autumn and cases appeared to centre about the infant departments of Croft Terrace, Dunn Street, and Grange Schools. All children who had had scarlet fever were carefully examined by the S.M.O. before re-admission—contacts were rigorously excluded and a careful lookout was kept for cases of sore throat, mild or missed cases in the schools. Careful cleansing and disinfection of school rooms were also undertaken. In no school did the prevalence become great or even approach epidemic proportions.

## 7. FOLLOWING UP.

The following procedure is adopted after school medical inspection :

(a) Where the parents have not been present a written notice is sent to the parents detailing defects and giving directions as to the best mode of treatment. Explanatory notices, full but simple, are given regarding defective teeth, enlarged tonsils and adenoids, ringworm, defective vision, impetigo, verminous conditions and scabies.

(b) Where the defect is urgent, *e.g.*, ringworm or tuberculosis, the head teacher is specially informed and the health nurse invariably pays a visit to the home.

(c) At the end of routine inspection at a particular school a complete list of the defects is left with the head teacher with any necessary remarks about treatment. I lay great stress on the value of this measure

for the School Medical Service has no better friend than the head teachers.

(d) Special measures are thereby taken to get all cases requiring immediate attention under proper control either the clinic for treatment or observation, the private doctor, the hospital or the tuberculosis dispensary.

(e) After an interval of a few months the S.M.O. pays a visit to the schools for re-examination. Defects unremedied become the object of intensive action through the head teacher, the S.M.O. and the school nurse, the powers of the Committee under section 12 of the Children's Act being set forth in a special notice.

(f) In all outstanding cases of urgency the above measures are generally found to be effective.

(h) In cases of defective vision the parents' consent to treatment by refraction and glasses is taken for granted, each case as discovered being put on the list for refraction generally about 4 months ahead.

By arrangement with the teacher each child is then automatically put forward for examination at the proper time. A similar method after obtaining the parent's permission in writing will be adopted for the operation for enlarged tonsils and adenoids and dental treatment.

During the year the nurse paid 908 following-up visits. It would be in the interests of the School Medical Service if more time for this purpose could be given. The appointment of an extra nurse for part time dental work will provide this service.

## 9. OPEN AIR EDUCATION.

(a) **Playground Classes.**—Nearly every school in the district has now arrangements for taking classes in the playground in suitable weather in the summer time, the time-table being so arranged that the playground is always in use for one purpose or another. In certain schools in the slums the air in the playground is dusty and smoke laden, but even so I am satisfied that the advantage to the child's health from open-air classes is great.

(b) **School Journeys.**—No school journeys by train are being undertaken, but in a few instances children have been taken to the park or to the country in groups for nature study lessons in the summertime. I am convinced that this is a feature of school life which, both on account of its hygienic and educational value, should be fostered.

(c) **School Camps.**—Each year the Head Master of the Central School organises a school camp for 12 days for some 50 or 60 of his



older boys, in 1920 several boys from the Secondary School joining the camp at Alnmouth. I spent one day at the camp investigating all the arrangements, sanitary and domestic, finding everything in first-class order. Major Dawson, the Camp Commandant and his helpers, mostly members of his teaching staff, were nearly all old army officers; consequently the camp was run on approved military lines. The boys slept on straw paillasses in bell tents, eight to a tent, bringing their own blankets. The tents and lines were clean and neat.

The boys looked well, happy and very obviously physically better for their camp life. The average gain per boy in weight during the 12 days was 2.125 lbs., the highest gain being 6 lbs., tribute surely to the excellence of the camp food. The following extract from my report is given :

“ The pity is that such a delightful experience for children cooped up amidst the smoke and grime of Jarrow should be confined to but 50 or 60 boys annually.

There should be opportunities for all boys and girls over 12 to have the same health giving experience. To do this something of the nature of a standing camp would be required where boys and girls would go in batches of a hundred or so all through the summer months.

Given the following primary essentials :—

1. A genuine desire on the part of parents to send their children to such a camp and to contribute to the expenses.
2. The co-operation and active help of the teachers of the different schools who would have to accompany the children.
3. The approval and financial assistance of this Committee.
4. The approval of the Board of Education which, provided a sound scheme were presented, may be considered certain.

I have no doubt that ways and means would be found to make the above suggestions a reality.”

The Authority have now the question of providing their own camp equipment and a semi-permanent camp under consideration, the whole question forming part of their scheme of development under the 1918 Act.

(d) **Open Air Class Rooms in Public Elementary Schools.**—At present no actual provision of such nature has been made. The managers of the Central St. Bede's School for girls, lately opened in a large private house, with excellent grounds, gardens and tennis courts have an unrivalled opportunity to develop an open air class room with its headquarters in the old tennis pavilion.



Recommendations to this effect have been made and doubtless will be carried into effect if possible during the summer of 1921.

- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| (e) Day Open Air Schools.         | } No provision so far has been made. |
| (f) Residential Open Air Schools. |                                      |

## 10. PHYSICAL TRAINING.

So far no Area Organiser of physical training has been appointed. The teachers as a whole take the keenest interest in this branch of their work and are at the present time attending a special course on the scheme of physical training, games and dancing introduced last year. From frequent observations of classes at work I am of opinion that the standard attained by the Jarrow schools in physical training is high. At the same time I am convinced that an organiser for physical training for the district would make the standard still higher, create enthusiasm and make the system more uniform. In addition this specialist would probably undertake massage work and corrective exercises of a special nature for such defects as round shoulders, spinal curvature, flat foot and probably breathing exercises for children with enlarged tonsils and adenoids, all matters of great importance from the point of view of the School Medical Service.

I should like to emphasise how much the children seem to enjoy the organised games of the new schedule.

## 11. PROVISION OF MEALS.

During the greater part of 1920 employment and wages were good. In the early part of the year, doubtless as a result of the moulders' strike, as many as 21 children were being fed, but after January the numbers fell until at the end of May no children were being fed. A few children received meals between October and December.

The increasing unemployment had not then affected the meals of the children, although clothing and boots had suffered. So far children have received meals on a poverty basis only, no exact scale being made, but the principle adopted of not letting any child attend school so insufficiently nourished as not to obtain proper benefit. In any cases of malnutrition observed in 1920 there has been no proof that the provision of meals free or on payment would benefit the child, but the Authority has approved of any child so selected receiving the advantage of school meals.

The meals have been provided at a local restaurant, breakfast and

dinner being provided. The breakfast consists of tea or cocoa, bread 4 ozs., scone or a bun and margarine. Dinner consists of 1 pint of thick nourishing soup made from stock, 3 ozs. of bread and a generous supply of pudding such as rice, cabinet or swiss roll.

The present arrangement can be termed moderately satisfactory, and this only while the numbers of children having meals remain small as during 1920. With any considerable increase due to long continued unemployment the Authority must face the necessity of providing their own arrangements.

## 12. SCHOOL BATHS.

None of the local elementary schools possess baths although (see sections on uncleanliness, impetigo, etc.) their provision would be of great value.

During the summer months children are taken by classes in rotation to the municipal baths under supervision where in addition to the opportunity for thorough cleansing they may be taught swimming.

## 13. CO-OPERATION OF PARENTS.

In 838 instances out of 1,692 children examined or 49.5% one or other parent, generally the mother, attended the routine inspection.

As a rule the parents are keenly interested in the results of the examination. Defects of the more dramatic type, *e.g.*, consumption, heart disease or chorea invariably receive prompt attention. Dental defects, crippling defects and enlarged tonsils and adenoids, to quote another group, are not so well attended to, because at present they involve trouble and expense on the part of the parent. As soon as the Authority can provide treatment for such defects cheaply and promptly, as fully intended, the parents will at once respond, the ground having been well broken by propaganda.

The question of following up and the results of treatment in each type of defect have already been dealt with.

## 14. CO-OPERATION OF TEACHERS.

I cannot speak too highly of the good work of head teachers and assistants in backing up the School Medical Service.

As regards medical inspection the head teachers keep and file the record cards, weigh and measure the height of the children and make



all arrangements for a suitable inspection room and the methodical supply of children of the group ages.

The teachers' influence in obtaining treatment is often extremely valuable as they are able to apply tactful pressure by pointing out the educational gain, *e.g.*, in remedying defective eye sight and hearing.

When the children are under treatment at the clinic the head teacher ensures the children attending promptly and regularly.

## **15. CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.**

Co-operation between the three school attendance officers and the school medical service in following up and securing medical treatment has been close and constant and of great value. As an example of this 2,402 exclusion notices and 1,856 re-admission notices were issued during 1920 by the S.M.O. All these notices passed through the hands of the S.A.O.s, who see to their observance. The policy has been adopted of giving moderately short exclusions, *e.g.*, in cases of scabies and impetigo and repeating them as required, the cases at home remaining under the supervision of the S.A.O. Again the S.A.O. s frequently bring before the S.M.O. children absent on account of illness but under no private practitioner.

The S.A.O.s keep complete lists of children permanently absent from school or excluded for lengthy periods and automatically bring these children before the School Medical Officer at regular intervals.

Children with dirty bodies or with dirty or ragged clothing or without boots are also referred to the School Medical Officer's department by the S.A.O.s for an opinion with regard to neglect.

## **16. CO-OPERATION OF VOLUNTARY BODIES.**

(a) The Children's Care Committee of the Education Committee meets monthly and all current matters relating to the School Medical Service are discussed, including a summary of the month's work.

(b) THE NATIONAL SOCIETY FOR PREVENTION OF CRUELTY TO CHILDREN does excellent work in this district. In two cases of bad neglect convictions were obtained and school children removed from parental control to the Harton Infirmary. In several other instances their inspector has co-operated by investigation and warning without bringing the cases to court.



# 17. BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

TABLE III.

NUMERICAL RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA IN 1920.

			Boys	Girls	Total
Blind (including partially blind) within the meaning of the Elementary Education (blind and deaf children) Act, 1893.					
Attending Public Elementary Schools ..			5	8	13
Attending Certified Schools for the Blind ..			..	1	1
Not at School .. ..			1	1	2
Deaf & Dumb (including partially deaf) within the meaning of the Elementary Education (blind & deaf children) Act, 1893.					
Attending Public Elementary Schools ..			4	1	5
Attending Certified Schools for the Deaf ..			..	..	..
Not at School .. ..			..	3	3
Mentally Deficient.	Feeble Finded.	Attending Public Elementary Schools ..	15	16	31
		Attending Certified Schools for Mentally Defective Children ..	..	..	..
		Notified to the Local Control Authority by Local Education Authority during the year	1	3	4
		Not at School .. ..	4	4	8
	Imbeciles.	At School .. ..	..	..	..
		Not at School .. ..	1	3	4
		Notified to Local Control Authority ..	1	2	3
	Idiots.	Notified to Local Control Authority ..	..	1	1
	Epileptics.				
Attending Public Elementary Schools ..			5	4	9
Attending Certified Schools for Epileptics ..			..	..	..
In Institutions other than Certified Schools..			..	..	..
Not at School .. ..			2	2	4
Physically Defective.	Pulmonary Tuberculosis.	Attending Public Elementary Schools ..	5	10	15
		Attending Certified Schools for Physically Defective Children ..	..	..	..
		In Institutions other than Certified Schools ..	3	5	8
		Not at School .. ..	20	11	31
	Crippling due to Tuberculosis.	Attending Public Elementary Schools ..	5	4	9
		Attending Certified Schools for Physically Defective Children ..	..	..	..
		In Institutions other than Certified Schools ..	..	1	1
		Not at School .. ..	6	6	12
	Crippling due to other causes than Tuberculosis, Paralysis, Rickets, Traumatism.	Attending Public Elementary Schools ..	19	19	38
		Attending Certified Schools for Physically Defective Children ..	..	..	..
		In Institutions other than Certified Schools ..	..	..	..
		Not at School .. ..	3	5	8
	Other Physical Defectives, <i>i.e.</i> , delicate and other children suitable for admission to open air schools ; children suffering from severe heart disease.	Attending Public Elementary Schools ..	5	6	11
		Attending Open Air Schools ..	..	..	..
		Attending Certified Schools for Physically Defective Children other than Open Air Schools..	..	..	..
		Not at School .. ..	3	3	6
Dull or Backward.					
Retarded 2 years .. ..			63	64	127
Retarded 3 years .. ..			16	30	46

### **Methods of Ascertaining and Dealing with such Children.**

As Table III. gives a summary of the total problem it has been inserted at this point instead of the appendix.

During 1920 a register has been completed of all exceptional children which has been kept up to date.

A certain number of these cases are picked up at routine inspection or as specials at the clinic. In addition the head teachers give a list of all children at school whom they believe to come within the above headings and the S.A.O.s a similar list of children not attending school. After full investigation the S.M.O. decides whether a child belongs to the category of the blind, deaf, defective, etc., and if so enters the child in the register. By these means it is hoped to keep the register up to date.

Children physically defective owing to pulmonary tuberculosis, crippling due to tuberculosis, and other causes have already been dealt with under the respective headings (see pages 14 and 15).

**Blind Children.**—One child totally blind was sent to an institution during 1920 and probably 2 others will be similarly dealt with during 1921. 13 children are in attendance at various schools including several bad myopes who would be better gathered together in a special class for defective vision.

**Deaf and Dumb.**—One child, deaf and dumb, awaits admission as soon as a vacant place is ready at an institution, while two other children will probably be given institutional treatment. The remaining 5 children are partially deaf and attending school under difficulties.

**Mentally Deficient Children.**—Apart from the 8 children notified to the Durham County Council, the Local Control Authority, there are 35 feeble minded children, 4 not attending school, who should be educated in a special school.

**Epileptics.**—Of the 13 epileptics 4 were not attending school. Several of these epileptics would be better at a special school on open-air principles.

**Other Physical Defectives, 17.**—Of these 6 were suffering from pronounced heart disease, 4 from debility and malnutrition, 1 from anæmia, 1 from leucocytlæmia, 1 from debility and corneal ulcers, and 4 from marked chronic bronchitis. Most of these children would probably be able to attend an open-air special school with marked advantage.

**Dull or Backward.**—In this group there were 127 children retarded 2 years and 46 children retarded 3 years. As many as possible of these



children were carefully examined with a view to correlating their mental condition with some physical defect with the following results :—

	No. with Defective Vision.	No. with Enlarged Tonsils, Adenoids, or Defective Hearing.	Other Defects.	No Defects.	Total Examined.
Children retarded 2 years	21	12	21	43	91
Children retarded 3 years or more ... ..	11	4	7	12	34

The above table, small though the numbers be, brings out two interesting and important facts :—

(1) The role which defective vision, enlarged tonsils and adenoids and deafness play in school retardation.

(2) With the increase in the degree of retardation the corresponding increase in the number of defects, 52% of the children retarded 2 years having defects as compared with 64% of those retarded 3 years or more.

These children were examined as specials and recommended treatment in the usual way. A certain proportion of these dull and backward children quite apart from medical defects would be better educated in special schools.

## 18. NURSERY SCHOOLS.

No nursery school have been established.

## 19. EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

During 1921 the Authority brought into force new by-laws in all respects practically similar to the model bye-laws of the Home Office restricting the ages, the times and the nature of employment for school children and young persons. In addition two of the S.A.O.s under the Secretary are responsible for the effective working of the scheme, while the S.M.O. makes periodical surveys of all the children and grants a certificate of fitness after medical examination to applicants for employment.

The following table shows a very considerable fall both in the number of children employed and in the hours worked as compared with previous years.



**Employment of School Children.**  
**Occupations, Working Hours per week, and Remuneration.**

OCCUPATION.	Total No. Employed	Working under 10 hours.			10—20 hours.			20—30 hours.		
		No.	Average Wage.	Ill effects observed by teacher	No.	Average Wage.	Ill effects observed by teacher	No.	Average Wage.	Ill effects observed by teacher
Paper Boys ...	35	9	2/1	...	25	4/-	3	1	5/6	...
Paper Girls ...	6	2	...	...	4	1/7	...	...	...	...
Errand Boys ...	49	19	3/-	...	30	4/-	1	...	...	...
Errand Girls ...	2	...	...	...	2	2/6	...	...	...	...
Shop Boys ...	4	1	3/-	...	2	5/3	...	1	4/-	1
Coal Boys ...	3	2	2/2	1	1	4/-	...	...	...	...
Mother's Help (Girl) ...	1	...	...	...	1	2/6	1	...	...	...
Totals ...	100	33	—	1	65	—	5	2	—	1

Medical examination showed that employers naturally picked the brightest and fittest children. The restriction of hours and the raising of the employable age to 12 have nearly put an end to the listlessness and inattention so forcibly complained of in previous reports.

Two children employed as errand boys by fruiterers were discovered to be suffering from ringworm of the head and promptly suspended. In a few cases deficiencies in clothing and footgear were noted for attention.

A Juvenile Care Committee for the district is being formed. Any recommendations as to future employment made as a result of the examination of leavers are given direct to parents. The Certifying Factory Surgeon of the district has been offered access to the medical findings of the S.M.O. with regard to any child examined by him.

## 20. EXAMINATION OF SCHOLARSHIP CANDIDATES, ETC.

During 1920 8 prospective pupil teachers and 8 scholarship candidates were examined by the School Medical Officer.



## APPENDIX.

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- (1) Summary of proposals relating to the School Medical Service, as drawn up in the Jarrow Authority's Draft Scheme, under the Education Act, 1918, ps. 49-50.
- (2) Statistical Tables I., II., IV., V., VI., as required by the Board of Education.

For Table III. see p. 30.



## SCHOOL MEDICAL SERVICE.

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### SUMMARY OF PROPOSALS UNDER EDUCATION ACT OF 1918.

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The principal proposals of the Authority with regard to the development of the school medical service may be summarised as follows :—

(1). The present organisation, with the School Medical Officer acting as Medical Officer of Health to be continued and developed, thus ensuring co-operation and co-ordination of all the health services in the Borough.

(2). To secure the proper development of the executive part both of present commitments, and also future, a part-time Assistant School Medical Officer to be appointed at an early date. It is felt that the Assistant School Medical Officer should be also Assistant Medical Officer of Health. At present 50 per cent. of an assistant's time could easily be absorbed in routine school medical work, and as schemes develop more of his time could be utilised. This is, of course, independent of special investigations which could be undertaken, which would be of value both locally and generally, and for which there is now no time available.

(3). Complete scheme for routine inspection and re-inspection of all code groups, with adequate following up of cases, entirely contingent on the provision of (2) and (5).

(4). The establishment of a dental clinic, with the appointment of a part-time dentist and part-time dental nurse, later, should it be necessary, both appointments to be full time.

(5). The absorption of the remainder of the dental nurse's time in the school medical service, especially that part concerned with the investigation of uncleanliness at the schools, and the following up of cases in the homes.

(6). With the complete absorption of the part-time dental nurse for dental services, and the development of other branches of the school medical service (*e.g.* the special schools) the appointment of an additional full-time school nurse.

(7). Provision of an extra session at the clinic, more especially for eye work and refractions.

(8). Provision of an extra session at the clinic for the detailed investigation of special cases, especially mentally and physically defective children.

(9). Operative treatment of tonsils and adenoids.

(10). X-Ray treatment of ringworm.

(11). Establishment of special schools.

(12). Establishment of a cleansing station for selected cases of uncleanness, scabies, and impetigo.

(13). Establishment of treatment by remedial exercises by physical training expert.

(14). Establishment of a new Medical Clinic as described.

**TABLE I.**

NUMBER OF CHILDREN INSPECTED 1ST JANUARY, 1920, TO 31ST DECEMBER, 1921.

**A.—ROUTINE MEDICAL INSPECTION.**

			ENTRANTS.					
Age ..			3	4	5	6	Other Ages.	Total.
Boys	...	...	...	...	235	11	1	247
Girls	...	...	...	...	242	7	3	252
Total ...			...	...	477	18	4	499

			Inter- mediate Group.	Leavers.			Other Ages.	Total.	Grand Total.
Age	..		8	12	13	14			
Boys	...	...	286	301	12	...	...	599	846
Girls	...	...	318	276	...	...	...	594	846
Total	...	...	604	577	12	...	...	1193	1692

**B.—SPECIAL INSPECTIONS.**

			Special Cases.		Re-examinations ( <i>i.e.</i> , No. of children re-examined).	
			(A).	(B).	(C).	(D)
Boys	...	...	142	1110	256	607
Girls	...	...	138	1066	268	605
Total	...	...	280	2176	524	1212

**C.—TOTAL NUMBER OF INDIVIDUAL CHILDREN INSPECTED BY THE MEDICAL OFFICER, WHETHER AS ROUTINE OR SPECIAL CASES (NO CHILD BEING COUNTED MORE THAN ONCE IN ONE YEAR).**

NO. OF INDIVIDUAL CHILDREN INSPECTED.

**3,932.**

- (A). Special cases seen at the schools.
- (B). Special cases seen at the clinic—the majority suffering from minor ailments and referred to the treatment clinic
- (C). Re-examinations at the schools.
- (D). Individual children re-examined at the inspection clinic.



TABLE II.

RETURN OF DEFECTS FOUND IN THE COURSE OF MEDICAL INSPECTION IN 1920.

DEFECT OR DISEASE.				Routine Inspections.		Specials.	
				No. referred for Treatment.	No. requiring to be kept under observation, but not referred for Treatment.	No. referred for Treatment.	No. requiring to be kept under observation, but not referred for Treatment.
I				2	3	4	5
Malnutrition .. ..				44	33	..	..
Uncleanliness—							
Head .. ..				122	1	36	..
Body .. ..				36	..	21	..
Skin	{	Ringworm—					
		Head .. ..	..	4	..	63	..
		Body .. ..	..	..	..	56	1
		Scabies .. ..	..	7	..	81	5
		Impetigo .. ..	..	24	..	380	11
Other Diseases (non T.B.) ..				22	..	*354	4
Eye	{	Blepharitis .. ..		24	..	61	..
		Conjunctivitis .. ..	..	6	..	57	1
		Keratitis .. ..	..	3	..	2	..
		Corneal Ulcer .. ..	..	5	2	21	1
		Corneal Opacities .. ..	..	..	..	..	..
		Defective Vision .. ..	..	239	22	29	2
		Squint.. ..	..	29	10	26	1
Ear	{	Other Conditions .. ..		..	5	29	2
		Defective Hearing.. ..	..	42	11	29	7
		Otitis Media .. ..	..	25	2	71	..
		Other Ear Diseases .. ..	..	1	..	33	2
Nose & Throat	{	Enlarged Tonsils .. ..		52	55	15	1
		Adenoids .. ..	..	6	10	7	1
		Enlarged Ts. Ads. .. ..	..	26	26	38	2
		Other Conditions .. ..	..	..	1	30	3
Enlarged Cervical Glands .. (non tubercular)				..	9	16	3
Defective Speech .. ..				..	8	2	..
Teeth—Dental Diseases .. ..				..	..	..	..
Heart & Circulation	{	Heart Disease—					
		Organic .. ..	..	2	16	4	4
		Functional .. ..	..	1	14	..	2
Lungs	{	Anaemia .. ..		10	13	9	5
		Bronchitis .. ..	..	3	24	10	9
		Other non T.B. Diseases .. ..	..	1	..	..	2
Tuber- culosis	{	Pulmonary—					
		Definite .. ..	..	4	..	2	..
		Suspected .. ..	..	3	11	3	20
		Non-Pulmonary—					
		Glands .. ..	..	7	12	9	10
		Spine .. ..	..	..	..	1	..
		Hip .. ..	..	..	3	..	..
		Other bones and joints .. ..	..	..	1	2	3
Nervous System	{	Skin .. ..		1	3	2	1
		Other forms .. ..	..	..	..	..	..
		Epilepsy .. ..	..	..	3	1	5
		Chorea .. ..	..	..	..	4	2
Deformities	{	Other Conditions .. ..		1	5	2	1
		Rickets .. ..	..	..	3	1	2
		Spinal Curvature .. ..	..	1	..	1	3
Other forms .. ..				1	19	..	..
Other Defects and Diseases ..				14	7	134	44

Number of individual children having defects which required treatment or to be kept under observation :—from Routine Inspection 887, from Special Inspection †1695.

\*Mainly minor septic sores.

†The great majority of these cases were minor ailments and were referred to the Treatment Clinic.

TABLE IV.

## TREATMENT OF DEFECTS OF CHILDREN DURING 1920.

## A.—TREATMENT OF MINOR AILMENTS.

Disease or Defect.	Number of Children.			
	Referred for Treatment.	Treated.		
		Under Local Education Authority's Scheme.	Otherwise.	Total.
Skin—				
Ringworm, Head ...	67	67	...	67
„ Body ...	56	49	7	56
Scabies ...	88	1	87	88
Impetigo ...	404	19	368	387
Minor Injuries	376	310	...	310
Other Skin Diseases }				
Ear Disease ...	167	115	24	139
Eye Disease (external and other) ...	208	134	18	152
Miscellaneous ...	99	99	...	99

## B.—TREATMENT OF VISUAL DEFECTS.

NUMBER OF CHILDREN.									
Referred for Refraction	Submitted to Refraction.				For whom Glasses were Prescribed.	For whom Glasses were Provided.	Recommended for Treatment other than by glasses.	Received other forms of Treatment.	For whom no Treatment was considered necessary.
	Under Local Education Authority's Scheme.	By Private Practitioner or Hospital.	Otherwise.	Total.					
306	232	3	1.	236	220	132	4	6	3

## C.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

Referred for Treatment.	NUMBER OF CHILDREN.			
	Received Operative Treatment.			Received other forms of Treatment.
	Under Local Education Authority's Scheme—Clinic or Hospital.	By Private Practitioner or Hospital.	Total.	
144	...	29	29	1

## NOTES TO TABLE IV., C. and D.

(1) The Authority submitted a scheme for operative treatment of enlarged tonsils and adenoids November, 1920. There is a waiting list of nearly 100 cases awaiting operation under the scheme.

(2) The Authority submitted the scheme to the Board of Education in December, 1920, for a Dental Clinic, a part time Dentist, and a part time Dental Nurse.

**TABLE V.**

SUMMARY OF TREATMENT OF DEFECTS AS SHOWN IN TABLE IV.  
(A., B., C., D. AND F., BUT EXCLUDING E.)

Disease or Defect.	NUMBER OF CHILDREN.			
	Referred for Treatment.	Treated.		
		Under Local Education Authority's Scheme.	Otherwise.	Total.
Minor Ailments ...	1465	794	504	1298
Visual Defects ...	306	132	10	142
Defects of Nose and Throat ...	144	...	30	30
Dental Defects ...	...	...	...	...
Other Defects ...	138	...	111	111
Total ...	2053	926	655	1581



TABLE VI.

SUMMARY RELATING TO CHILDREN MEDICALLY INSPECTED AT THE ROUTINE  
INSPECTIONS DURING THE YEAR 1920.

(1)	The total number of children medically inspected at the routine inspection...	1692
(2)	The number of children in (1) suffering from :—	
	Malnutrition ... ..	77
	Skin Disease ... ..	57
	Defective Vision (including Squint) ... ..	300
	Eye Disease ... ..	45
	Defective Hearing... ..	53
	Ear Disease ... ..	28
	Nose and Throat Disease... ..	176
	Enlarged Cervical Glands (non tubercular) ... ..	9
	Defective Speech ... ..	8
	Dental Disease ... ..	909
	Heart Disase	
	Organic ... ..	18
	Functional ... ..	15
	Anæmia ..... ..	23
	Lung Disease (non Tubercular) ... ..	28
	Tuberculosis	
	Pulmonary { definite ... ..	4
	suspected... ..	14
	Non Pulmonary ... ..	27
	Disease of the Nervous System ... ..	9
	Deformities ... ..	24
	Other Defects and Diseases ... ..	21
(3)	The number of children in (1) suffering from defects other than uncleanness, of defective clothing, of foot-gear) who require to be kept under observation (but not referred for treatment) ... ..	*290
(4)	The number of children in (1) who were referred for treatment (excluding uncleanness, defective clothing, etc.)... ..	*597
(5)	The number of children in (4) who received treatment for one or more defects (excluding uncleanness, defective clothing, etc.)... ..	*275

“ Specials should not be included in the table.”

\*Excluding dental defects.



